SUBMARINE WARFARE BEGAN IN AMERICA

When the Hunley Sank the U. S. S. Housatonic, in 1864, the First Victim of a Submarine Went to the Bottom—Northern Newspapers Called It "a Dastardly Attack" and Even to the Head of the Confederate Navy It Was "An Act Unworthy of a Chivalrous Nation"

By Heber Blankenhorn

"—— One Cornelius's son
Hath made the Hollanders an invisible eel
To swim the Haven at Dunkirk and sink all
The shipping there, ——."
—Ben Jonson's reference to Van Dribble's submarine, 1620.

AN American submarine was the first to sink a warship. Had that submarine survived and sunk a fleet, had it been further developed so as to fix its legal uses, we might not in 1915-16 have come so near to war over its power and status.

America has been thrice at the point of giving submarine building a great push; in the war of '76, when a Revolutionary submarine attempted the first known attack on any warship; on the eve of 1812, when Fulton died just as he was in a fair way to make the submarine a work-a-da terror; and in 1863, when America went through the whole submarine cataclysm, both sides of it, within the memory of living men.

With the first two this article will not deal, since the hand of history has written and moved on, but with the third errors which have already crept into the histories of the Federal blockade of '63 are cleared up by the energetic memory of Captain J. H. Tomb, formerly engineer in the Confederate Navy and the only survivor of the first torpedo crew that struck a blow or damaged an enemy's warship.

"UNRECOGNIZED IN CIVILIZED WARFARE," WAS THE SOUTH'S OWN PROTEST.

Seventy-six, erect, white-haired, but full of life, Captain Tomb, with his twinkling eyes, long coat and broad-brim, is a picture of that Southern gentleman over whom grandchildren clamber and persuade to story telling. He and his of '63 were esteemed by the North the Tirpitzes of the Civil War, delightfully blackguarded by the morally indignant. Witness old newspapers talking of "dastardly and unchivalrous attack," while even Commander Ingraham of his own navy declared the use of torpedoes as "unrecognized in civilized warfare and unworthy of a chivalrous nation." Hear, then, with added interest what the captain of engineers, now living in Florida, has to tell of the dread submarine and the stark necessity which led to its origin and use.

"It was early in the '60s, when some of us began to realize that the South was likely to be beaten because of sea power. In 1862 the Yankee blockade was making itself felt. More hung on it than simply getting in supplies. If we could break the blockade England might recognize us, might even intervene. That was how we in Charleston got to experimenting with torpedoes.

TORPEDOES WERE DEEMED "NEW FANGLED" AND "UNWORTHY OF THE SOUTH."

"You can't imagine the difficulties we had. No navy at all, and mighty little metal or chemicals or skilled workmen to build one. Major Francis Lee invented the spar torpedo, and his first warships were rowboats. He couldn't get steam launches because old Commander Ingraham thought torpedoes 'new fangled' and 'unworthy of the South.'

"Lee's torpedo was a copper can holding fifty pounds of rifle powder, with four sensitive fuses in knobs on its end. Each knob was a tube of tin lead, inclosing a glass vial of sulphuric acid. When bumped against a frigate's bottom the tube bent, the vial broke and the acid set off the powder. The device was stuck on a spar slung underneath a rowboat, so that the torpedo was seven feet under water and ten feet ahead of the bow.

"Merchants of Charleston raised a fund and built the first of the Confederate 'Davids.' Dr. St. Julien Ravenel devised her with Captain Theo Stoney. An old German mechanic, named Ebo, from the Ravenel plantation, put a little boiler, engine and propeller into her. She could make about seven knots.

"The David was a cigar shaped boat, thirty-three feet long, six feet beam, of wood. Her torpedo spar was a three-inch boiler tube, twelve feet long, attached to the bow, holding the charge, sixty-five pounds of rifle powder, eight and a half feet below the surface. Then we found a flaw in the tube and had to cut off two feet, putting the torpedo but six and a half feet down, which no doubt prevented more serious injury to the Ironsides when the torpedo exploded.

THE DAVID, A CONFEDERATE CRAFT THAT WAS ALL-BUT-A-SUBMARINE.

"She was an all-but-submarine. Only a few feet of her funnel, her two little ventilators and the coaming of her hatchway, fourteen inches high, showed when she was afloat. Mrs. Ravenel, the authoress, named her David, because of the disparity with the leading blockader, a 3,000-ton ironclad which had been shelling Charleston houses.

"On October 5, 1863, at 7 o'clock in the evening, we set out from Eason's wharf for the first successful attack on an enemy warship made by a torpedo boat. We were four—Lieutenant W. T. Glassell, C. S. N., commanding; Engineer J. H. Tomb, C. S. N.; J. W. Cannon, pilot, and James Sullivan, fireman. Our quarry was the frigate New Ironsides, then the most powerful in any navy.

"It was a black night, chilly outside, but stuffy inside our little egg of a warship. We churned along down the harbor, the hatch coaming awash. Beyond Fort Sumter we began to thread the enemy's guard boats off Morris Island. Not a peep from their pickets. Ahead we made out the fleet—sloops, transports, monitors and the huge bulk and spars of the New Ironsides.

"'If only we had ten or twelve torpedoes how helpless this mighty fleet would be,' we thought. 'Down would go the monitors. Tucker would rush out and scatter the rest, the blockade would be broken, the South saved.' We turned toward the admiral's ship, determined to pay her the highest compliment.

LIEUTENANT GLASSELL TAKES A LITTLE PRECAUTION IN TERMS OF BUCKSHOT.

"It was Lieutenant Glassell's plan to strike on the first of the flood tide, when she would be swinging upstream. We lay on and off. From the fleet came the music of fife and drum. It ceased; then came the 9 o'clock gun for lights out. Yellow dots winked and vanished, all but the riding lights. About 9:05 we seemed certain to be discovered. We put about and headed for the ironclad, full speed.

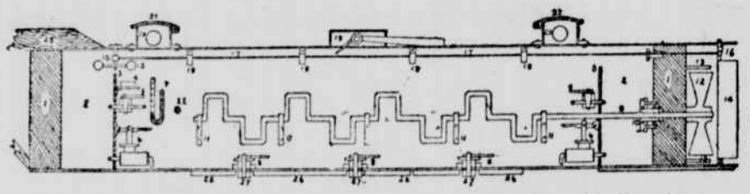
"Lieutenant Glassell, cool as ever I saw officer, but fully realizing what he had volunteered to accomplish, climbed up and sat on the edge of the hatch, steering us with his feet. Then Cannon handed up to him a double-barrelled shotgun. Its buckshot were for international law. At that time a torpedo boat making a secret attack on a warship had no legal status, and we meant to guard against being hanged in case we were captured.

"Gun in hand, feet on wheel, he piloted us to within two minutes of her. Then, down amid our busy machinery, I heard from above a faint hail, "Ahoy, ahoy!" Glassell cocked both triggers. Again the hail, a little louder. Suddenly very loud and clear from straight above us: 'What boat is that?' It was the officer of the enemy's deck, Ensign Howard.

"Bang! Glassell's shot brought him down, poor fellow, mortally wounded. That sudden blow must have thrown their deck into confusion. Glassell tossed his gun overboard. Just as their small arms began to let go we were in her shadow, under her starboard quarter. Glassell signalled to reverse the engines. Then we struck.

Captain J. H. Tomb, Confederate Navy, 1863.

"The explosion was terrific. The David plunged and seemed to be going right down. A huge column of water tore up into the night and fell in a flood on the Ironsides' deck and swashed down on the David. It rushed through her hatches and down her funnel, drowned the fires out and began to fill her hold. The engines jammed. We rocked and bumped and settled fast. I could do nothing with the old engine and so reported to Lieutenant Glassell. He calmly ordered us overboard, each man for himself. Their fire was peppering the water all around when I struck off, hoping to swim for Morris Island.



Plan of the Confederate Submarine Hunley, Which Went by Man-Power.

"The Ironsides didn't seem to be sinking very fast, but as well as I could judge in the water, her spars had a tilt. Their guard boats began coming up. Then I made out something like three piles in a line, drifting away unnoticed—the David's funnels. She was still afloat. I swam cautiously back to her.

A voice hailed me in a whisper. It was Cannon, the pilot, clinging to her life lines. The man couldn't swim a stroke. Volunteered for a job like that and couldn't swim! He *was* brave. I got aboard. The water in her wasn't up to her boiler. I caught up the fires, righted the engine, pulled Cannon in and we headed back for Charleston.

"The fleet gave us a real rain of small arms fire. There were thirteen holes in her funnel and hatch when we got back to Atlantic wharf, but none in us.

"President Davis promoted me to chief engineer and I was put in command of the David. Glassell was picked up by a transport, put in irons and sent North to be hanged. He wasn't, however. The Ironsides was stove for forty feet and so shaken that she never fired another gun at Charleston. Finally she was sent to drydock.

MONTHS OF SLEEPLESS SHOOTING AT KEGS AND LOGS IN CHARLESTON HARBOR.

"The effect on the fleet was tremendous. Their morale was shaken. They lived in nightly fear of being blown up, unwarned. For months after they kept themselves sleepless shooting every keg and log that floated out of Charleston Harbor. In Charleston I covered the David over with a quarter-inch of steel and put a cap on her funnel, while they set to building more torpedo boats.

"The most serious effect of their scare was that they put booms around all their big ships. We couldn't get at them with the Davids. That led us to the submarine—Hunley's."

Not quite just like that, with a snap of the fingers. The David, a surface boat, sneaking up like a duckhunter, showed the necessity for the submarine, but was no more a step to it than making a leap on skis was a step to the aeroplane. To submarine is to turn fish. To do it man must be born again. The history of turning fish is as fascinating as turning bird, and, as in aviation, Americans have had more than a finger in it. The Confederate contribution is more important as a sidelight on human nature than as an aid to modern submarine builders. Yet of one of the Confederate submarines no less an authority than Simon Lake has said, with evident surprise, that it had good design. This was the New Orleans, which was launched with its crew of two negroes inside. It dived from the ways, but did not rise. Recently dredges found it intact, two skeletons inside.

THE ETHICS OF SUBMARINE WARFARE AS UNDERSTOOD BY GENERAL BEN BUTLER.

It is to be granted that the history of submarines is a satire on ethics. They play hob even with national consciences, until to-day the official reasons for and against their use as war boats are a ghastly joke on all mankind. Here's a pleasant form the joke took in '64, when General Butler, U. S. A., caught the man who had torpedoed the Federal Commodore Jones into fragments in the James River. He handed his prisoner over to the naval commander, with the kindly message: "If you can use him, do so; if not, hang him." The Confederate was lashed to the cutwater of a gunboat going upriver, and "before we went 300 yards the man called out: 'Stop, captain, for God's sake; there's a torpedo just over there!' So we cleared the channel."

If the South disposed of the "moral" law with a shotgun blast in '63, the laws of physics were harder to overcome when they built their submarine. Untrained in science, the Southerners tried to condense three centuries of submarine planning into a few months. The Hunley fought nature more than the North and, since the South was desperate and determined, the Hunley became the most terrible crew-killer in this sort of history. To invent her, learn how to use her and strike one blow with her cost the Confederates thirty-two men.

Horace L. Hunley's "fish boat" was a real submarine, with a shell of boiler iron, about 30 feet over all, 3½ feet beam and 5 feet deep. It was a large pea pod, its short stem being the spar torpedo. Eight peas inside were the eight men who sat in a row along a crank shaft, turning the screw to propel her at three knots. Two manholes let them out, sometimes alive. Two side fins, short planes, a yard back of the bow and stern, were the means of submerging. McClintock and Howgate built her at Mobile in 1863. Tried out in the bay there, she began her career by killing her entire crew—eight men lost.

Then she was brought to Charleston to be used against the Federal blockaders, and Captain Tomb made her acquaintance. It was first planned that the fish boat should tow her torpedo. She was to ride the surface until in the enemy's vicinity, then submerge, dive under the victim ship and rise on the other side until the torpedo at the end of the hawser should explode by contact on the ship's bottom.

Lying at the wharf in Charleston Harbor with her manholes open, she was swamped by the wash of a passing steamer, and only her commander, Lieutenant Paine, and one other got out of her as she foundered. Raised again, with a new volunteer crew, the same thing happened again, Paine and two others escaping this time. Eighteen men lost, perhaps nineteen, as the records are poorly kept and only half the names of the hardy men who perished in defence of the harbor could be found to place on their monument in Charleston recently.

THERE WAS RISK ENOUGH AND TO SPARE IN SUBMARINE PRACTICE IN THOSE DAYS.

"I remember one day," says Captain Tomb, "when Lieutenant Dixon and I were standing on Atlantic wharf as she went by. Her foremanhole was open, and Hunley, standing in it, waved to us and shouted: 'Do you want to come aboard for a dive?' Hunley himself was not often in charge of her. Soon he shut the hatch and slowly she dived. He was then abreast of the receiving ship Indian Chief, and his plan was to dive under her. We didn't see him come up and finally walked away from the wharf. The fish boat had no air storage and could stay down only an hour or so.

"That afternoon word spread through the city that Hunley had not come up. Some days later they raised her, all her men in a knot under her hatch—like worms under a log—dead."

Her maker and twenty-three men lost, and still Charleston supplied a fifth crew. New volunteers for a man-eater, a "peripatetic coffin," whose desperate venture was a dubious private enterprise accepted with reluctance by the nation's Navy Department! Scharf, the Confederate naval historian, says that she suffocated this fifth crew at practice, but does not specify where.

Undaunted, Tomb's friend Dixon (an infantryman, at that) took charge of the horrible fish. General Beauregard, then in command of the defence of Charleston, on Tomb's report that her "lack of buoyancy made her a likely coffin," would allow her to be used only as a surface boat, like the David.

CAPTAIN TOMB TELLS OF THE FINAL TRIP OF "THE HORRIBLE FISH."

"After many consultations," says Captain Tomb, "Dixon and I agreed it would be best for the Hunley to strike when on the surface. I used to tow him down the harbor at night, using my steam power of the David to save his men until he could get near the enemy. Then one night his torpedo, for which he had adopted by new raise-and-lower device, came loose and floated around, within an ace of blowing up both of us. I asked that the David be relieved of such duty. Dixon often told me that the Hunley now worked beautifully and that he had been down as much as twenty feet in her."

The Hunley struck at last, February

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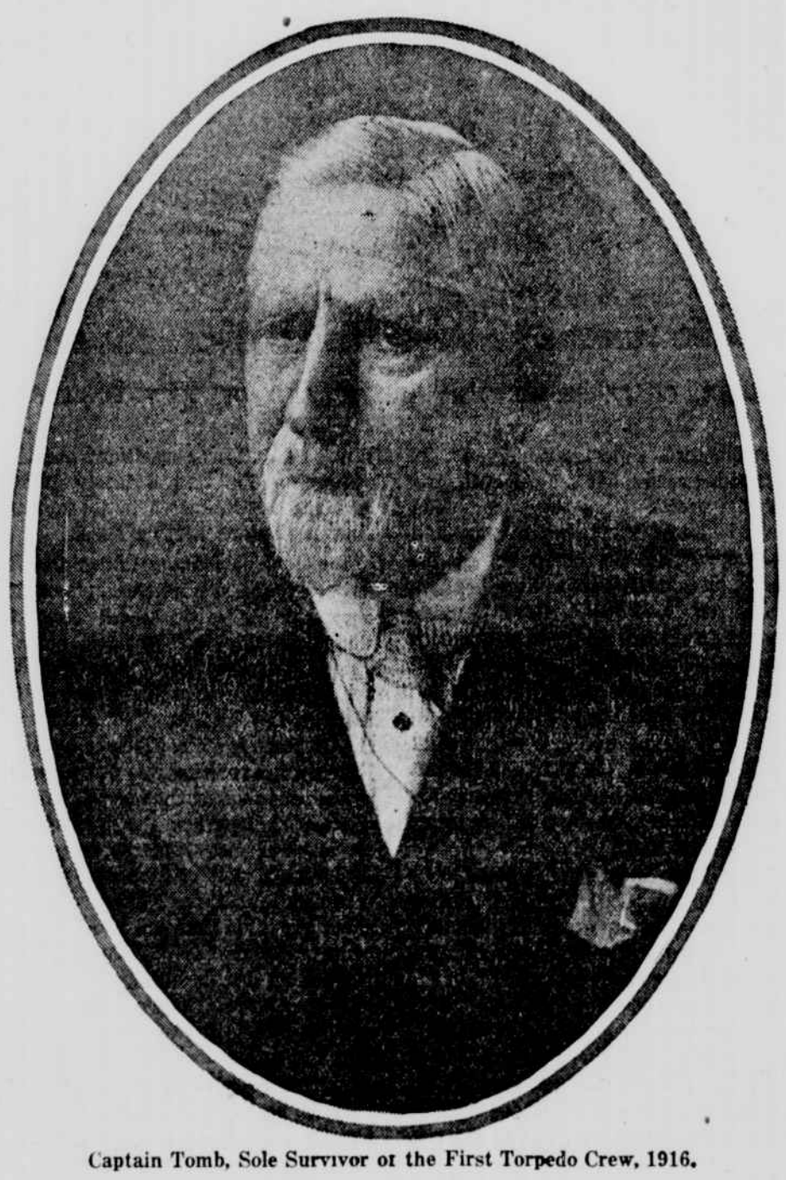

Captain Tomb, Sole Survivor of the First Torpedo Crew, 1916.